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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,277	07/30/2001	Ronen Ofek	2681/OJ660	2409
25937	7590	05/17/2005	EXAMINER	
ZARETSKY & ASSOCIATES PC 8753 W. RUNION DR. PEORIA, AZ 85382-6412			PHAN, HANH	
			ART UNIT	PAPER NUMBER
			2633	

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/918,277	OFEK ET AL	
	Examiner	Art Unit	
	Hanh Phan	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/22/2001.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. In claim 27, line 4, the phrase "assigning a virtual color the links" should be changed to -- assigning a virtual color to the links --.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3, 6, 9, 10, 13-26, 29, 32 and 39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

-Claims 3, 16 and 29 recites the limitation "**the same optical fiber**" in line 1.

There is insufficient antecedent basis for this limitation in the claim.

-Claim 6 recites the limitation "**the physical color**" in line 2. There is insufficient antecedent basis for this limitation in the claim.

-Claim 9 recites the limitation "**said step of configuring**" in line 1. There is insufficient antecedent basis for this limitation in the claim.

-Claim 10 recites the limitation "**said step of configuring**" in line 1. There is insufficient antecedent basis for this limitation in the claim.

-Claims 13, 26 and 39 recites the limitation " **the step of switching traffic to the restoration path associated said link failure in the event of a link failure** " in lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim.

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-Claim 14 recites the limitation " **the links within said network** " in line 3. There is insufficient antecedent basis for this limitation in the claim.

-Claims 19 and 32 recites the limitation "**the default virtual color of each link**" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kang et al (Pub. No.: US 2002/0089712 A1) in view of Chaudhuri (US Patent No. 6,324,162).

Regarding claims 1, 14, 27 and 40, referring to Figure 2, Kang discloses a method of determining a protection route in a network for links having a color associated therewith, the method comprising the steps of:

removing all links having a color other than that of the link to be protected to generate a single color logical topology (page 2, paragraphs [0057]-[0065]);

removing the link to be protected from the single color logical topology (page 2, paragraphs [0057]-[0062]); and

generating a restoration path for the link to be protected only from the single color logical topology (page 2, paragraphs [0057]-[0065] and page 3, paragraphs [0066]-[0068]).

Kang differs from claims 1, 14, 27 and 40 in that he fails to teach the links having a wave division multiplexing (WDM) color associated therewith. However, Chaudhuri in US Patent No. 6,324,162 teaches the links having a wave division multiplexing (WDM) color associated therewith (Fig. 2, col. 3, lines 10-25). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the links having a wave division multiplexing (WDM) color associated therewith as taught by Chaudhuri in the system of Kang. One of ordinary skill in the art would have been motivated to do this since Chaudhuri suggests in column 3, lines 10-25 that using such the links having a wave division multiplexing (WDM) color associated therewith have advantage of allowing providing an optical communication system with high capacity and high speed.

Regarding claims 2, 15 and 28, Kang teaches further comprising the step of configuring one or more nodes in the network in accordance with the restoration path (page 2, paragraphs [0057]-[0065]).

Regarding claims 3, 16 and 29, Kang further teaches the links share the same optical fiber using WDM (Fig. 2).

Regarding claims 4, 17 and 30, Kang further teaches the links span more than a single fiber utilizing WDM means (Fig. 2).

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Regarding claims 5, 18 and 31, Kang further teaches the logical topology comprises the topology of the links of the network (page 2, paragraphs [0057]-[0065]).

Regarding claims 6, 19 and 32, Kang teaches further comprising the step of assigning a virtual color to each link equal to the physical color (page 2, paragraphs [0057]-[0065]).

Regarding claims 7, 20 and 33, the combination of Kang and Chaudhuri teaches generating the restoration path comprises executing a routing algorithm capable of generating a route based on the single color logical topology (Fig. 2 of Chaudhuri, col. 4, lines 53-67).

Regarding claims 8, 21 and 34, the combination of Kang and Chaudhuri teaches the routing algorithm is chosen from the group comprising Dijkstra, Breadth First Search (BFS) and Depth Search First (DFS) (i.e., Dijkstra's shortest path algorithm, col. 4 of Chaudhuri, lines 53-67).

Regarding claims 9, 22 and 35, Kang further teaches the step of configuring comprises utilizing a signaling protocol chosen from the group comprising Reservation Protocol with Traffic Extensions (RSVP-TE) and Constraint based Label Distribution Protocol CR-LDP (page 2, paragraph [0043]).

Regarding claims 12, 25, 36 and 42, Kang further teaches the method is implemented in nodes within the network (Fig. 2).

Regarding claims 13, 26, 37 and 43, Kang further teaches the step of switching traffic to the restoration path associated the link failure in the event of a link failure (Fig. 2).

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Regarding claims 10, 23 and 38, the combination of Kang and Chaudhuri teaches the step of configuring comprises utilizing a network-management protocol such as SNMP (Fig. 2 of Kang and Fig. 2 of Chaudhuri).

Regarding claims 11, 24, 39 and 41, the combination of Kang and Chaudhuri teaches the method is implemented in a Network Management System (NMS) (Fig. 2 of Kang and Fig. 2 of Chaudhuri).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Azuma et al (US Patent No. 6,430,150) discloses communication node, restoration method and communication network.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.


HANH PHAN
PRIMARY EXAMINER